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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,377	12/09/2003	Wilford T. Yopp	FGT 1857 PA	1376

28549 7590 02/03/2005  
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SOUTHFIELD, MI 48034

EXAMINER
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TRAN, DALENA

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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EXAMINER
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ART UNIT	PAPER
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20050131

DATE MAILED:

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**Commissioner for Patents**

## Office Action Summary

Application No.

10/707,377

Applicant(s)

YOPP, WILFORD T.

Examiner

Dalena Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/10/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Notice to Applicant(s)

1. This application has been examined. Claims 1-20 are pending.
2. The prior art submitted on 3/10/04 has been considered.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9, are rejected under 35 U.S.C.103(a) as being unpatentable over Gloger et al. (6,838,980) in view of Shuman et al. (US 2003/0065432 A1).

As per claim 1, Gloger et al. disclose a pre-crash sensing system for a vehicle, comprising: at least one sensor for detecting at least one object located external to the vehicle (see at least the abstract), and a controller coupled to at least one sensor and intended to selectively generate an object identification and an object classification (see at least column 2, lines 21-42; columns 2-3, lines 50-21; and columns 3-4, lines 63-18). Gloger et al. do not disclose object identification list and object classification list. However, Shuman et al. disclose generate an object identification and object classification list (see at least [0086] through [0087]; and [0153] through [0156]), object classification list for transmission to a safety countermeasure system (see at least [0096] through [0104]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Gloger et al. by combining generate an object identification and object classification list, and object

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classification list for transmission to a safety countermeasure system for continuously store vehicle surrounding information to generate a warning to prevent collision.

Also, as per claims 2-3, Shuman et al. disclose wherein at least one sensor is utilized for detecting at least one parameter of at least one object, at least one sensor transmitting at least one parameter to controller, controller selectively processing at least one parameter to generate object identification list and object classification list, and at least one parameter includes at least one of a height, a width, a depth, a range, a range rate, an angle, and a visual feature (see at least [0153] through [0156]).

As per claims 4 and 6, Gloger et al. disclose at least one sensor includes at least one of a visual imaging camera and an electro-magnetic wave ranging device, wherein visual imaging camera is selected from the group consisting of a monocular camera and a binocular camera (see at least columns 1-2, lines 61-42).

As per claims 5 and 7, Gloger et al. disclose at least one sensor includes both visual imaging camera and an electro-magnetic wave ranging device (see at least columns 3-4, lines 23-17).

As per claim 8, Gloger et al. do not disclose object identification list and object classification list. However, Shuman et al. disclose an object tracking module for storing object identification list and object classification list, object identification list including a plurality of identities of previously detected objects as defined by a plurality of archived parameters (see at least [0155]), a process determining module coupled to object tracking module and at least one sensor, process determining module for receiving object identification list from object tracking module and receiving at least one parameter from at least one sensor, process determining

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module for determining that object is a previously undetected object (see at least [0156]), and an object classifying module coupled to and actuated by process determining module, object classifying module for identifying at least one object and updating object identification list stored in object tracking module, object classifying module for classifying object into a predetermined category and updating object classification list stored in object tracking module (see at least the abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Gloger et al. by combining generate an object identification and object classification list, for continuously tracking objects surrounding vehicle in order to detect any dangerous imminent to the vehicle.

Also, as per claim 9, Shuman et al. disclose an object tracking module for storing object identification list and object classification list, object identification list including a plurality of identities of previously detected objects as defined by a plurality of archived parameters (see at least [0155]), a process determining module coupled to object tracking module and at least one sensor, process determining module for receiving object classification list from object tracking module and receiving at least one parameter from at least one sensor, process determining module for determining that object is a previously unclassified object (see at least [0156]), and an object classifying module coupled to and actuated by process determining module, object classifying module for identifying at least one object and updating object identification list stored in object tracking module, object classifying module for classifying object into a predetermined category and updating object classification list stored in object tracking module (see at least the abstract).

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5. Claims 10-20, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Ishikawa et al. (5,689,264)

. Farmer et al. (6,085,151)

. Schiffmann et al. (6,794,987)

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Dalena Tran



January 31, 2005